

Observation Data of the Sea Birds in the Subantarctic Ocean during the Outward Cruise of the 13th Japanese Antarctic Research Expedition 1971–1972

Masahiro AOYANAGI*

第13次航海往路に亜南極海において観察した海鳥の目視データ

青柳昌宏*

要旨：筆者はすでに第13次航海中の海鳥の出現記録を発表したが(青柳, 1973), そこでは出現個体数を5段階に整理し, 緯度きざみでまとめたので, 一日を通しての海鳥の活動の生のデータが報告できなかった. 本報は, フリーマントルを出港した翌々日から3日間, 主としてワタリアホウドリの出現海域で行った観察データである. 日出前から日没後にいたる15時間, 毎正時と毎30分ごとに10分間ずつ, 1日31回肉眼および双眼鏡を使用してカウントした出現鳥種の個体数を示している. 記録された鳥種は11種であった. 昼前と夕方に活動の山が見られるが, 今回はデータを資料として記録するにとどめ, 考察は加えない.

A number of ornithologists have made observations of sea bird in the Southern Seas. Japanese Antarctic Research Expedition made a few observations of sea birds. OZAWA (1967) reported the distribution of the principal sea birds in the Southern Seas. The present writer (1973) recently reported occurrence record of the principal sea birds during the cruise of the icebreaker FUJI.

In December 1971 the writer had an opportunity to cruise from Western Australia to the offing of the Queen Mary Land, Antarctica. The route of the icebreaker FUJI is shown in Fig. 1. This report deals with the occurrence data of sea birds during the cruise, with some meteorological factors which might affect their occurrence.

The observation was made thirty-one times every day from 05:00 to 20:00 at interval of 30 minutes, and 10 minutes was spent to watch the birds each time. The observation was done on the flight deck except on the days of rough weather. When the weather was very bad, the observation deck under the flight deck was used.

* 東京教育大学雑司ヶ谷分校. Zôshigaya Branch, Faculty of Education, Tokyo Kyoiku University, Mejiro-dai, Bunkyo-ku, Tokyo.

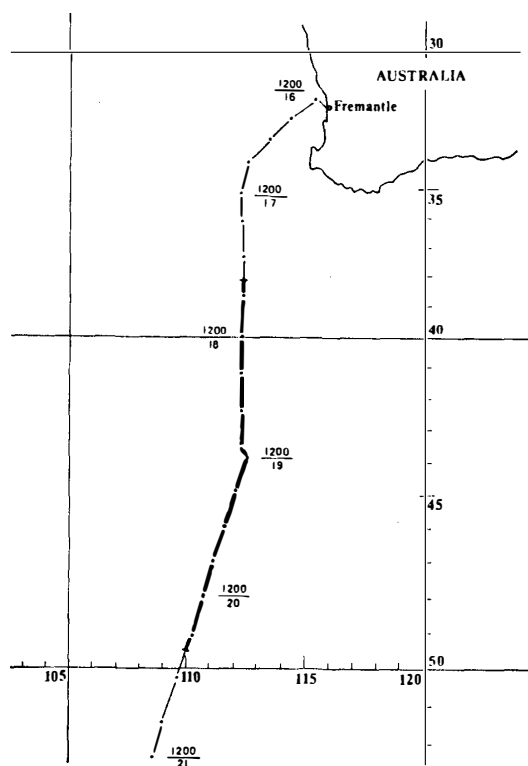


Fig. 1. Route of the icebreaker FUJI.
Observations were made along the bold line.

The number of individuals' birds within about 500 meters distance was counted with the naked eye or with the aid of a binocular (7×21 , 7.1°).

The tonnage of the icebreaker was about 8,000 tons and the ship sailed at the rate of 9 to 13 knots an hour. Wandering albatrosses and white chinned petrels were first observed on the day after departure from Fremantle, and both species were dominant during the observation. Eleven species of sea birds were recorded within three days.

Table 1 shows the occurrence data of the birds. Table 2 shows meteorological data during the observation period.

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References

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Table 2. Meteorological data during the observation period.

| LMT | Position | | W | Temp. | | Air press. | Cloud | Wind | Wave | |
|-----------------|----------|---------|----------|-------|------|------------|---------|------|------|---|
| | Lat. S | Long. E | | Air. | Wat. | | | | | |
| XII • 18 • 1971 | 0500 | 38°31.0 | 112°14.5 | ☉ | 13.7 | 13.9 | 1017.5 | 8 | 08 | 3 |
| | 0800 | 39°06.0 | 112°15.0 | ☉ | 13.2 | 12.5 | 1018.3 | 8 | 06 | 2 |
| | 1100 | 39°45.3 | 112°15.0 | ⊖ | 14.3 | 12.9 | 1018.5 | 3 | 09 | 2 |
| | 1400 | 40°25.0 | 112°15.5 | ☉ | 14.2 | 12.2 | 1017.3 | 8 | 12 | 2 |
| | 1700 | 41°01.0 | 112°16.0 | ☉ | 12.2 | 11.7 | 1016.8 | 8 | 18 | 2 |
| | 2000 | 41°35.0 | 112°17.0 | ○ | 11.2 | 11.5 | 1018.6 | 2 | 21 | 3 |
| XII • 19 • 1971 | 0500 | 43°24.0 | 112°17.5 | ⊖ | 9.8 | 10.4 | 1020.3 | 3 | 16 | 3 |
| | 0800 | 43°46.0 | 112°20.0 | ☉ | 10.1 | 10.3 | 1021.3 | 8 | 12 | 3 |
| | 1100 | 43°46.0 | 112°28.0 | ☉ | 10.0 | 10.3 | 1020.5 | 8 | 12 | 3 |
| | 1400 | 44°08.3 | 112°21.5 | ☉ | 10.5 | 10.3 | 1019.3 | 7 | 22 | 4 |
| | 1700 | 44°40.0 | 112°07.5 | ☉ | 10.6 | 10.1 | 1019.5 | 8 | 23 | 4 |
| | 2000 | 45°12.0 | 111°51.5 | ⊖ | 9.8 | 9.2 | 1019.1 | 6 | 19 | 4 |
| XII • 20 • 1971 | 0500 | 46°47.0 | 111°05.5 | ☉ | 9.0 | 9.4 | 1018.2 | 8 | 20 | 3 |
| | 0800 | 47°14.0 | 110°52.5 | ☉ | 9.5 | 9.7 | no data | 8 | 16 | 3 |
| | 1100 | 47°40.5 | 110°54.0 | ☉ | 8.7 | 9.8 | 1018.1 | 8 | 20 | 3 |
| | 1400 | 48°16.0 | 110°30.0 | ☉ | 8.9 | 7.1 | 1018.3 | 7 | 14 | 3 |
| | 1700 | 48°53.0 | 110°15.5 | ⊖ | 7.9 | 5.9 | 1017.2 | 3 | 18 | 3 |
| | 2000 | 49°25.0 | 109°59.8 | ☉ | 7.3 | 5.8 | 1015.8 | 8 | 15 | 3 |